

WHAT IS CLAIMED IS:

1. An image reading apparatus comprising:

an image reading unit having image reading means for reading an image;

5 a first original carriage for carrying an original and for reading an original image in contact with an image reading unit which is moving;

a second original carriage for carrying an original and for reading an original image in contact
10 with an image reading unit which is in a stationary state;

a stay provided between said first original carriage and said second original carriage;

urging means for urging said image reading
15 unit toward said first original carriage or toward said second original carriage;

a guide portion, provided outside an image reading region, for guiding said image reading unit away from said stay when said image reading unit moves
20 between said first original carriage and said second original carriage; and

a member to be guided slidable relative to said guide when said image reading unit moves between said first original carriage and said second original
25 carriage, said member to be guided in being disposed at a balanced position in a moving direction of said image reading unit and is substantially in line

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contact with said guide portion.

2. An apparatus according to Claim 1, wherein
said guide portion has a first inclined surface or
first curved surface for moving said image reading
unit away from said stay upon movement from said first
original carriage to said second original carriage,
and a second inclined surface or second curved surface
for moving said image reading unit away from said stay
upon movement from said second original carriage to
said first original carriage.

3. An apparatus according to Claim 2, wherein an
angle formed between said first original carriage and
a tangent line of said first inclined surface or first
curved surface and an angle formed between said second
original carriage and a tangent line of said second
inclined surface or second curved surface, are not
more than 30° .

4. An apparatus according to Claim 2, wherein
said guide portion is in the form of a semicircular
projection.

5. An apparatus according to Claim 1, wherein
said member to be guided is in the form of a circular
shaft member.

6. An apparatus according to Claim 1, wherein said guide portion is provided at each of longitudinal ends of said stay, and said member to be guided is provided at each of longitudinal ends of said image reading unit.

7. An apparatus according to Claim 1, further comprising a shaft for supporting said urging means, and said image unit is provided with!! a through hole, through which said shaft is penetrated.

8. An apparatus according to Claim 7, wherein said through hole has a thinner thickness at a peripheral portion than at the other portion!.

9. An apparatus according to Claim 1, wherein said member to be guided is disposed at a position at which a weight balance is established in the moving direction of said image reading unit.

10. An apparatus according to Claim 1, wherein said member to be guided is provided at a position where urging force of said urging means is balanced.

11. An apparatus according to Claim 1, wherein said member to be guided is disposed at a position where force applied by said guiding member is

balanced.

12. An apparatus according to Claim 1, wherein a
product of a geometrical moment of inertia of said
5 stay and a Young's modulus thereof is not less than
6.5 x 10⁶ kg. mm².

13. An apparatus according to Claim 1, wherein.

10 14. An apparatus according to Claim 1, wherein
said image reading unit includes projecting means for
projecting light to the original and a lens for
directing light reflected by the original to the image
reading means.

15 15. An apparatus according to Claim 1-14, wherein
said image reading apparatus is usable with an image
forming apparatus having an image forming means for
forming on a recording material an image corresponding
20 to an original read by said image reading apparatus.